HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: BAKER POWER CHARGE #20 STANDARD (HLS)

Revision Date: 04-Jan-2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BAKER POWER CHARGE #20 STANDARD (HLS)

Synonyms: None Chemical Family: Explosive

Application: Explosive Charge

Manufacturer/Supplier Halliburton Energy Services

P.O. Box 1431

Duncan, Oklahoma 73536-0431

Emergency Telephone: (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Potassium perchlorate	7778-74-7	0-10	Not applicable	Not applicable
Strontium nitrate	10042-76-9	0-10	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview Explosive. May cause eye, skin, and respiratory irritation. May effect the blood's

ability to carry oxygen. May be harmful if swallowed.

4. FIRST AID MEASURES

Inhalation If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably

mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15

minutes. Get medical attention. Remove contaminated clothing and launder before

reuse. Destroy or properly dispose of contaminated shoes.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water

for at least 15 minutes and get medical attention immediately after flushing.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Treat symptomatically.

FIRE FIGHTING MEASURES

Flash Point/Range (F): Not Determined Flash Point/Range (C): Not Determined **Flash Point Method:** Not Determined

Autoignition Temperature (F): 400 **Autoignition Temperature (C):** 204

Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Flammable solid, may detonate under adverse conditions. Oxidizer. May ignite

combustibles. Sprinkler and/or deluge systems recommended for bulk storage

areas.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

NFPA Ratings: Health 1, Flammability 1, Reactivity 3 Health 1, Flammability 1, Reactivity 3 **HMIS Ratings:**

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Use only competent persons for cleanup.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Isolate area and remove sources of friction, impact, heat, low level electrical current,

and RF energy. Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Do NOT consume food, drink, or tobacco in contaminated areas. Avoid contact with

eyes, skin, or clothing. Avoid creating or inhaling dust. Wash hands after use.

Launder contaminated clothing before reuse.

Keep away from friction, impact, and heat. Store away from combustibles. **Storage Information**

EXPOSURE CONTROLS/PERSONAL PROTECTION

Use in a well ventilated area. **Engineering Controls Respiratory Protection** Dust/mist respirator. (95%)

Hand Protection Cloth gloves.

Skin Protection Cotton coveralls, undergarments, and socks. Conductive soled shoes. Anti-static

clothing.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Eyewash fountains and safety showers must be easily accessible. Other Precautions

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: Gray to black

PHYSICAL AND CHEMICAL PROPERTIES

Odor: Odorless :Ha Not Determined

Specific Gravity @ 20 C (Water=1): 1.14

Density @ 20 C (lbs./gallon): Not Determined Bulk Density @ 20 C (lbs/ft3): Not Determined **Boiling Point/Range (F):** Not Determined Boiling Point/Range (C): Not Determined Freezing Point/Range (F): Not Determined Freezing Point/Range (C): Not Determined Vapor Pressure @ 20 C (mmHg): Not Determined Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined

Solubility in Water (g/100ml): Insoluble

Not Determined Solubility in Solvents (g/100ml): VOCs (lbs./gallon): Not Determined Viscosity, Dynamic @ 20 C (centipoise): Not Determined Viscosity, Kinematic @ 20 C (centistrokes): Not Determined Partition Coefficient/n-Octanol/Water: Not Determined Molecular Weight (g/mole): Not Determined

STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid May detonate with friction, impact, heat, and low level electrical current.

Incompatibility (Materials to

Avoid)

Strong alkalis. Strong acids. Combustible materials. Organic matter. Reducing

agents.

Hazardous Decomposition

Products

Carbon monoxide and carbon dioxide. Chlorine.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Eye or skin contact, inhalation. All explosives are dangerous and must be handles **Principle Route of Exposure**

> carefully and used following approved safety procedures under the direction of competent, experience persons in accordance with all applicable regulations and

ordinances.

Inhalation May cause respiratory irritation. May cause blood disorders including prolonged

weakness and fatigue.

Skin Contact May cause skin irritation. **Eye Contact** May cause eye irritation.

May reduce the blood's ability to transport oxygen (methemalobinemia). Ingestion

Aggravated Medical Conditions Blood disorders. Eye ailments.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are

chronic health hazards.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive / Not determined

Developmental Toxicity:

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not applicable

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT

UN1325, Flammable Solid, Organic, N.O.S. (Contains Strontium Nitrate, Potassium Perchlorate Mixtures), 4.1, II EX-9003405
NAERG 133

Canadian TDG

Flammable Solid, Organic, N.O.S.(Contains Strontium Nitrate, Potassium Perchlorate Mixtures), 4.1, UN1325, II EX-9003405

ADR

UN1325, Flammable Solid, Organic, N.O.S. (Contains Strontium Nitrate, Potassium Perchlorate Mixtures), 4.1, II EX-9003405

Air Transportation

ICAO/IATA

UN1325,Flammable Solid, Organic, N.O.S., 4.1, II (Contains Strontium Nitrate, Potassium Perchlorate Mixtures) EX-9003405

Sea Transportation

IMDG

UN1325, Flammable Solid, Organic, N.O.S. (Contains Strontium Nitrate, Potassium Perchlorate Mixtures), 4.1, II EX-9003405 EmS F-A, S-G

Other Shipping Information

Labels: Flammable Solid

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances

Not applicable

EPA SARA (311,312) Hazard

Class

Acute Health Hazard

Fire Hazard Reactive Hazard

EPA SARA (313) Chemicals

This product does not contain a toxic chemical for routine annual "Toxic Chemical

Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity

Not applicable.

EPA RCRA Hazardous Waste

Classification

If product becomes a waste, it does meet the criteria of a hazardous waste as

defined by the US EPA, because of:

Reactivity D003

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law One or more components listed.

PA Right-to-Know Law One or more components listed.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory.

WHMIS Hazard Class F Dangerously Reactive Material

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

Additional Information For additional information on the use of this product, contact your local Halliburton

representative.

For questions about the Material Safety Data Sheet for this or other Halliburton

products, contact Chemical Compliance at 1-580-251-4335.

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or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of

the user.

END OF MSDS